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<120> POLYNUCLEOTIDE FUNCTIONALLY CODING FOR THE LHP PROTEIN FROM MYCOBACTERIUM TUBERCULOSIS, ITS BIOLOGICALLY ACTIVE DERIVATIVE FRAGMENTS, AS WELL AS METHODS USING THE SAME

<130> 0660-0165-0XPCT

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<160> 34

<170> PatentIn version 3.0

<210> 1
<211> 1277
<212> DNA
<213> Mycobacterium tuberculosis

<400> 1
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gctgggtggat caggccccag cgccggcgcg ggccctgctgc gcgcggagtc gctacctggc 180
gcaggtgggt cgttgaccccg cacgcccgtg atgtctcagc tgatcgaaaa gccggttgcc 240
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ggtccgggag cgatgggcca gggttcgcaa tccggcggct ccaccagccc gggtctggtc 360
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gacgactggt gagctcccgtaatgacaaca gacttcccg ccaccgggc cggaagactt 480
gccaacatt tggcgaggaa ggtaaagaga gaaagttagtc cagcatggca gagatgaaga 540
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ccagcaaaaa tgggacgcca cggctaccga gctgaacaac ggcgtgcaga acctggcgcg 1080
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cgcatagggc aacgccgagt tcgcgttagaa tagcgaaaca cgggatcggg cgagttcgac 1200
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atggcggccg actacga 1277

<210> 2

<211> 524

<212> DNA

<213> Mycobacterium tuberculosis

<400> 2
ctgcagcagg tgacgtcggt gttcagccag gtggcggca ccggcggcgg caaccagcc 60
gacgaggaag ccgcgcagat gggctgctc ggcaccagtc cgctgtcgaa ccatccgctg 120
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gcaggtgggt cgttgaccccg cacgcccgtg atgtctcagc tgatcgaaaa gccggttgcc 240
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ggtccgggag cgatgggcca gggttcgcaa tccggcggct ccaccagccc gggctggc 360
gcgcggcac cgctcgcgca ggagcgtgaa gaagacgacg aggacgactg ggacgaagag 420
gacgactggt gagctcccgt aatgacaaca gacttccgg ccaccgggc cggaagactt 480
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<210> 3

<211> 481

<212> DNA

<213> Mycobacterium tuberculosis

<400> 3
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gacgactggt gagctcccgtaatgacaaca gacttcccgcc accaccggc cggaagactt 480
g 481

<210> 4

<211> 302

<212> DNA

<213> Mycobacterium tuberculosis

<400> 4
atggcagaga tgaagaccga tgccgctacc ctgcggcagg aggcaggtaa ttgcgagcgg 60
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ggccagtggc gcggcgccggc ggggacggcc gcccaggccg cgggtggtgcg cttccaagaa 180
gcagccaata agcagaagca ggaactcgac gagatctcgat cgaatattcg tcaggccggc 240
gtccaaatact cgagggccga cgaggagcag cagcaggcgc tgtcctcgca aatgggcttc 300
tg 302

<210> 5

<211> 100

<212> PRT

<213> Mycobacterium tuberculosis

<400> 5

Met Ala Glu Met Lys Thr Asp Ala Ala Thr Leu Gly Gln Glu Ala Gly
1 5 10 15

Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Thr Gln Ile Asp Gln Val
20 25 30

Glu Ser Thr Ala Gly Ser Leu Gln Gly Gln Trp Arg Gly Ala Ala Gly
35 40 45

Thr Ala Ala Gln Ala Ala Val Val Arg Phe Gln Glu Ala Ala Asn Lys
50 55 60

Gln Lys Gln Glu Leu Asp Glu Ile Ser Thr Asn Ile Arg Gln Ala Gly
65 70 75 80

Val Gln Tyr Ser Arg Ala Asp Glu Glu Gln Gln Gln Ala Leu Ser Ser
85 90 95

Gln Met Gly Phe
100

<210> 6

<211> 49

<212> PRT

<213> Mycobacterium tuberculosis

<400> 6

Met Ala Glu Met Lys Thr Asp Ala Ala Thr Leu Gly Gln Glu Ala Gly
1 5 10 15

Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Thr Gln Ile Asp Gln Val
20 25 30

Glu Ser Thr Ala Gly Ser Leu Gln Gly Gln Trp Arg Gly Ala Ala Gly
35 40 45

Thr

<210> 7

<211> 42

<212> PRT

<213> Mycobacterium tuberculosis

~~S~~
~~W~~

<400> 7

Gln Glu Ala Ala Asn Lys Gln Lys Gln Glu Leu Asp Gly Ile Ser Thr
1 5 10 15

Asn Ile Arg Gln Ala Gly Val Gln Tyr Ser Arg Ala Asp Glu Glu Gln
20 25 30

Gln Gln Ala Leu Ser Ser Gln Met Gly Phe
35 40

<210> 8

<211> 21

<212> PRT

<213> Mycobacterium tuberculosis

<400> 8

Gln Glu Ala Gly Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Tyr Thr
1 5 10 15

Gln Ile Asp Gln Val
20

<210> 9

<211> 16

<212> PRT

<213> Mycobacterium tuberculosis

<400> 9

Gly Asp Leu Lys Thr Gln Ile Asp Gln Val Glu Ser Thr Ala Gly Ser
1 5 10 15

<210> 10

<211> 16

<212> PRT

<213> Mycobacterium tuberculosis

Ser
<400> 10

Gly Ser Leu Gln Gly Gln Trp Arg Gly Ala Ala Gly Thr Ala Ala Ala
1 5 10 15

<210> 11

<211> 16

<212> PRT

<213> Mycobacterium tuberculosis

<400> 11

Gln Glu Ala Ala Asn Lys Gln Lys Gln Glu Leu Asp Glu Ile Ser Thr
1 5 10 15

<210> 12

<211> 28

<212> PRT

<213> Mycobacterium tuberculosis

<400> 12

Ser Thr Asn Ile Arg Gln Ala Gly Val Gln Tyr Ser Arg Ala Asp Glu
1 5 10 15

Glu Gln Gln Gln Ala Leu Ser Ser Gln Met Gly Phe

20

25

<210> 13

<211> 16

<212> PRT

<213> Mycobacterium tuberculosis

D
G
S

<400> 13

Arg Ala Asp Glu Glu Gln Gln Gln Ala Leu Ser Ser Gln Met Gly Phe
1 5 10 15

<210> 14

<211> 21

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 14

ctgcagcagg tgacgtcggt g

21

<210> 15

<211> 23

<212> DNA

(Signature)

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 15

ccgggtggcc gggaaagtctg tgt

23

<210> 16

<211> 23

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 16

actactttctt ctttctaccc tcc

23

cont

<210> 17
<211> 39
<212> DNA
<213> Artificial/Unknown

<220>
<221> misc_feature
<222> ()..()
<223> Description of Artificial Sequence: synthetic DNA

<400> 17
ggggggatcc ggtaccagggt gacgtcgttg ttcagccag 39

<210> 18
<211> 39
<212> DNA
<213> Artificial/Unknown

<220>
<221> misc_feature
<222> ()..()
<223> Description of Artificial Sequence: synthetic DNA

<400> 18

ggggggtacc ggatcctcggt agtcggccgc catgacaac

39

<210> 19

<211> 31

<212> DNA

<213> Artificial/Unknown

*Nx
G*

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 19

ggggggatcc caggtgacgt cgttgttcag c

31

<210> 20

<211> 31

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

AS

<400> 20
gggggttacc acggtgacgt cgttgttcag c

31

<210> 21

<211> 32

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 21

gggggttacc aacggtgacg tcgttgttca gc

32

<210> 22

<211> 31

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

AB

<400> 22
ggggggtacc gggtggccgg gaagtctgtt g 31

<210> 23

<211> 31

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> () . . ()

<223> Description of Artificial Sequence: synthetic DNA

<400> 23
ggggggatcc ctgcagcagg tgacgtcggt g 31

<210> 24

<211> 30

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> () . . ()

AP
U
<223> Description of Artificial Sequence: synthetic DNA

<400> 24
ccctgcaacg aacctgccgt cgactccacc

30

<210> 25

<211> 39

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 25
ggggggatcc ggtaccaggt gacgtcgttg ttcagccag

39

<210> 26

<211> 51

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

AB
VJ

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 26

ggggggatcc tcaatggtga tggtgatgg ggaagccat ttgcgaggac a

51

<210> 27

<211> 22

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 27

gcatcgaatg catgtctcggt

22

<210> 28

<211> 99

<212> PRT

<213> Mycobacterium leprae

<400> 28

AB
Met Ala Glu Met Ile Thr Glu Ala Ala Ile Leu Thr Gln Gln Ala Ala
1 5 10 15

Gln Phe Asp Gln Ile Ala Ser Gly Leu Ser Gln Glu Arg Asn Phe Val
20 25 30

Asp Ser Ile Gly Gln Ser Phe Gln Asn Thr Trp Glu Gly Gln Ala Ala
35 40 45

Ser Ala Ala Leu Gly Ala Leu Gly Arg Phe Asp Glu Ala Met Gln Asp
50 55 60

Ile Arg Gln Leu Glu Ser Ile Val Asp Lys Leu Asn Arg Ser Gly Gly
65 70 75 80

Asn Tyr Thr Lys Thr Asp Asp Glu Ala Asn Gln Leu Leu Ser Ser Lys
85 90 95

Met Asn Phe

<210> 29

<211> 108

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> () . . ()

<223> Description of Artificial Sequence: Expression cassette

<400> 29
aggaacagat ctatggatc cggtaccctg cagcatcacc atcaccatca ctagtgaaat 60
agcgaaaacac gggatcgggc gagttcgacc ttccgtcggt ctcgccct 108

10
E

<400> 31
gaattcggc tcggtaacccg gggatcctct agagtcgacc tgcaggcatg caagctt 57

<210> 32

<211> 30

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 32
cccgaggatcct cagccaagct gaccgacctg 30

<210> 33

<211> 33

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

*15
Wide*

<400> 33
gccccgtacca cgacggctca tcgccagttt gcc 33

<210> 34

<211> 15

<212> PRT

<213> Mycobacterium tuberculosis

<220>

<221> misc_feature

<222> ()..()

<223> Xaa is any amino acid

<400> 34

Ala Glu Met Lys Thr Asp Ala Ala Thr Leu Xaa Gln Glu Ala Gly
1 5 10 15
